

Notice of Allowability

Application No.

10/728,805

Examiner

Jannelle M. Lebron

Applicant(s)

SILVERBROOK, KIA

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 03/21/06.
2. ☒ The allowed claim(s) is/are 1 and 3-7.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/129,437.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>12/12/03</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 01/12/2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 6,802,594 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

2. Claims 1 and 3-7 are allowed.

3. The following is an examiner's statement of reasons for allowance:

Prior art does not disclose or suggest either alone or combined the claimed "wherein the support member is a beam and the printhead modules include MEMS manufactured chips having at least one fiducial on each;

wherein, the fiducials are used to misalign the printhead modules by a distance calculated from:

i) the difference between the coefficient of thermal expansion of the beam and the printhead chips;

ii) the spacing of the printhead chips along the beam; and,

iii) the difference between the production temperature and the operating temperature."

4. Claims 3 - 7 are considered allowable subject matter since they depend on allowable base claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Hackleman (US Patent 5,734,394) discloses a printhead assembly for an inkjet printer, the printhead assembly comprising:

a support member (24 or 26 in figure 2) for mounting the printhead assembly within an inkjet printer, and, a plurality of printhead modules (30 in figure 2 and 6) mounted to the support member;

the support member has an overall coefficient of thermal expansion such that it changes its dimensions between its production temperature, when the printhead is assembled (this limitation is referring to the process of manufacturing the assembly and thus is given no patentability weight), and an operation temperature reached during normal operation of the printer (column 5, lines 13-17; column 8, line 60 – column 9, line 7); wherein,

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the printhead modules are mounted to the support member at the production temperature such that they align when the printhead assembly is at the operating temperature (column 6, line 66 – column 7, line 3).

7. US 2005/0041064 to Silverbrook discloses a method of aligning individual printhead modules in a pagewidth printer, the printhead modules being mounted adjacent each other along an elongate support, the elongate support having a higher coefficient of thermal expansion than the modules such that during use the temperature of the elongate support raises from ambient to an operating temperature, wherein the elongate support lengthens and the modules displace relative to each other.

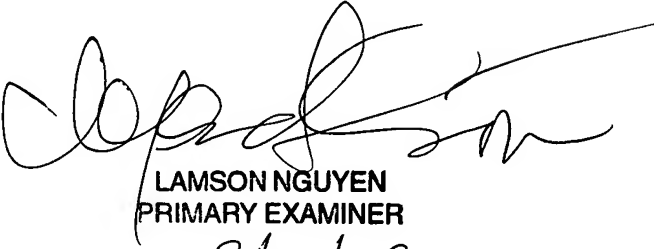
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jannelle M. Lebron whose telephone number is (571) 272-2729. The examiner can normally be reached on Monday thru Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JML
03/28/2006



LAMSON NGUYEN
PRIMARY EXAMINER
03/29/06